

REMARKS

Applicant respectfully requests reconsideration. Claims 30-41, 70-74 and 80-83 were previously pending in this application. No new matter has been added.

Statement of Substance of Interview

This is responsive to the Interview Summary mailed May 22, 2008.

An interview was conducted on April 24, 2008 with the persons named on the Interview Summary, to discuss the rejections of record. Applicant discussed submitting certain arguments and showings regarding the support for the pending claims in its priority applications, and the lack of support for the cited prior art in a priority application thereof.

Rejections Under 35 U.S.C. § 102

The Examiner rejected claims 30-40, 70-74 and 80-83 under 35 U.S.C. 102(a) as being anticipated by Fire et al. (WO 99/32619 A1, the “Fire PCT application”) and under 35 U.S.C. 102(e) as being anticipated by Fire et al. (U.S. 6,506,559 B1, the “Fire patent”). Applicant respectfully traverses the rejections and requests reconsideration.

The effective filing dates of the Fire PCT application and the Fire patent do not extend to the earliest filing date, i.e., the US provisional application 60/068562 (the “Fire provisional”) for at least the following reasons. The Fire provisional does not disclose a micro-organism comprising an expression vector that comprises promoters flanking a DNA sequence such that the promoters initiate transcription of said DNA sequence to produce double stranded RNA, nor any use of such a micro-organism.

The Fire provisional discloses that dsRNA can be synthesized *in vitro* or *in vivo* (see, e.g., page 7, lines 11-15; page 11, lines 17-24; page 15, line 5). The dsRNA that is produced is introduced into cells or organisms primarily by injection (see throughout the application, e.g., at page 7, lines 16-19; figure legends to Figs. 2-4 at pages 8-10; page 12, lines 1-12; page 16, lines 18-23; Table 1). The Fire provisional discloses that strands can be purified and annealed prior to injection (see, e.g., page 11, lines 23-29; page 15, lines 16-26, page 17, lines 23-26).

Clearly, the Fire provisional does not disclose each and every element of the claimed invention, and therefore does not provide priority for the aspects of the cited Fire PCT application that relate to Applicant's claimed invention.

Applicant's priority documents support the claimed invention. Applicant's first priority application, GB 9814536.0, was filed on July 3, 1998, well prior to the publication of the Fire PCT application and the filing date of the Fire patent. Applicant's second priority application, GB 9827152.1, was filed on December 9, 1998. This date also is prior to the publication of the Fire PCT application and the filing date of the Fire patent.

Exemplary support for the claimed invention is found in the first priority filing, at least as follows:

Aspects relating to a micro-organism comprising an expression vector that comprises promoters flanking a DNA sequence such that the promoters initiate transcription of said DNA sequence to produce double stranded RNA: page 2, lines 19-27; page 3, lines 16-19; page 4, line 26 to page 5, line 3; page 6, lines 19-22; page 7, line 25 to page 8, line 16; page 10, line 28-35; page 14, lines 10-22; page 15, lines 9-14 and 21-25; claims 1-19; Figure 3, Figure 4, Figure 6, Figure 7 and descriptions thereof.

Applicant's second priority application, GB 9827152.1, was filed on December 9, 1998. Exemplary support for the invention is found in the second priority filing, at least as follows:

Aspects relating to a micro-organism comprising an expression vector that comprises promoters flanking a DNA sequence such that the promoters initiate transcription of said DNA sequence to produce double stranded RNA: page 1, line 30 to page 3, line 9; page 4, lines 5-22; page 5, line 29 to page 6, line 17; page 8, line 22 to page 9, line 8; page 10, lines 1-28; page 11, line 14 to page 12, line 6; page 12, line 8 to page 13, line 30; page 14, lines 17-30; page 16, line 13 to page 17, line 13; page 17, lines 15-19; page 19, line 14 to page 20, line 1; page 20, lines 14-27; page 20, line 34 to page 21, line 3; page 23, lines 2-4; claims 1-28 and 50-55; Figure 3, Figure 4, Figure 6, Figure 7 and descriptions thereof.

Therefore, both of the priority applications for the instant application clearly support the invention now claimed. In contrast, the Fire provisional application does not support any such invention.

As a result, neither the Fire PCT application nor the Fire patent anticipate the claimed invention. Accordingly, Applicant respectfully requests withdrawal of the rejection of claims 30-40, 70-74 and 80-83 under 35 U.S.C. § 102(a) and under 35 U.S.C. 102(e).

Rejection Under 35 U.S.C. § 103

The Examiner rejected claims 30-40, 70-74 and 80-83 under 35 U.S.C. 103(a) as unpatentable over Fire et al. (WO 99/32619 A1, the “Fire PCT application”) or Fire et al. (U.S. 6,506,559 B1, the “Fire patent”) as applied to claims 30-39, 70-74 and 80-83, above, further in view of Talkad et al. (J. Bacteriol. 135: 528-541, 1978). Applicant respectfully traverses the rejections and requests reconsideration.

The deficiencies in the disclosure of the provisional application, which serves as the priority document for the Fire PCT application and the Fire patent, respecting the claimed invention are discussed in the response to the anticipation rejection above.

In contrast, as demonstrated above, both of the priority applications for the instant application clearly support the invention now claimed.

According to the Examiner, the Talkad et al. reference describes *E. coli* strains deficient in RNase III and that RNase III cleaves bacteriophage T7 RNAs as well as double-stranded RNAs. According to the Examiner, it would have been obvious to substitute the *E. coli* strains deficient in RNase III of Talkad et al. for the strains used in the Fire PCT application and the Fire patent.

Applicant's response is that even if such a substitution was made, the Talkad et al. reference does not supply any other of the elements of the claimed invention that are missing from the Fire PCT application and the Fire patent.

As a result, neither of the combinations of references provide all of the elements of the claimed invention and thus neither of the combinations of references render the claimed invention obvious.

Accordingly, Applicant respectfully requests withdrawal of the rejection of claims 30-40, 70-74 and 80-83 under 35 U.S.C. § 103(a)

CONCLUSION

A Notice of Allowance is respectfully requested. The Examiner is requested to call the undersigned at the telephone number listed below if this communication does not place the case in condition for allowance.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicant hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

Respectfully submitted,
Plaetinck et al., Applicant

By: /John R. Van Amsterdam/
John R. Van Amsterdam, Ph.D.,
Reg. No. 40,212
Wolf, Greenfield & Sacks, P.C.
600 Atlantic Avenue
Boston, Massachusetts 02210-2206
Telephone: (617) 646-8000

Docket No.: D0590.70011US02

Date: June 6, 2008

X06/07/08x